11.24.00

PATENT APPLICATION TRANSMITTAL LETTER
(Small Entity)

Docket No.
27850-1

TO THE ASSISTANT COMMISSIONER FOR PATENTS

Transmitted herewith for filing under 35 U.S.C. 111 and 37 C.F.R. 1.53 is the patent application of:

BARNES, RICHIE D

For: **MOTORCYCLE SOUND SYSTEM**

Enclosed are:

- ☒ Certificate of Mailing with Express Mail Mailing Label No. **EK704812145US**
- ☒ **FOUR** sheets of drawings.
- ☐ A certified copy of a application.
- ☒ Declaration ☒ Signed. ☐ Unsigned.
- ☒ Power of Attorney
- ☐ Information Disclosure Statement
- ☐ Preliminary Amendment
- ☒ **ONE** Verified Statement(s) to Establish Small Entity Status Under 37 C.F.R. 1.9 and 1.27.
- ☒ Other: **POSTCARD**

CLAIMS AS FILED

For	#Filed	#Allowed	#Extra		Rate	Fee
Total Claims	20	- 20 =	0	x	$9.00	$0.00
Indep. Claims	3	- 3 =	0	x	$40.00	$0.00
Multiple Dependent Claims (check if applicable) ☐						$0.00
					BASIC FEE	$355.00
					TOTAL FILING FEE	$355.00

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  - ☐ Charge the amount of as filing fee.
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  - ☐ Charge the issue fee set in 37 C.F.R. 1.18 at the mailing of the Notice of Allowance, pursuant to 37 C.F.R. 1.311(b).

Dated: 11/21/00

Signature

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Express Mail Label No. **EK704812145US**

UTILITY PATENT APPLICATION TRANSMITTAL
(Small Entity)

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Docket No.
27850-1
Total Pages in this Submission
32

TO THE ASSISTANT COMMISSIONER FOR PATENTS
Box Patent Application
Washington, D.C. 20231

Transmitted herewith for filing under 35 U.S.C. 111(a) and 37 C.F.R. 1.53(b) is a new utility patent application for an invention entitled:

MOTORCYCLE SOUND SYSTEM

and invented by:

BARNES, RICHIE D

If a CONTINUATION APPLICATION, *check appropriate box and supply the requisite information:*

☐ **Continuation** ☐ **Divisional** ☐ **Continuation-in-part (CIP)** of prior application No.: _____

Which is a:

☐ **Continuation** ☐ **Divisional** ☐ **Continuation-in-part (CIP)** of prior application No.: _____

Which is a:

☐ **Continuation** ☐ **Divisional** ☐ **Continuation-in-part (CIP)** of prior application No.: _____

Enclosed are:

Application Elements

1. ☒ Filing fee as calculated and transmitted as described below

2. ☒ Specification having **17** pages and including the following:

   a. ☒ Descriptive Title of the Invention

   b. ☒ Cross References to Related Applications *(if applicable)*

   c. ☐ Statement Regarding Federally-sponsored Research/Development *(if applicable)*

   d. ☐ Reference to Microfiche Appendix *(if applicable)*

   e. ☒ Background of the Invention

   f. ☒ Brief Summary of the Invention

   g. ☒ Brief Description of the Drawings *(if drawings filed)*

   h. ☒ Detailed Description

   i. ☒ Claim(s) as Classified Below

   j. ☒ Abstract of the Disclosure

UTILITY PATENT APPLICATION TRANSMITTAL
(Small Entity)

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Docket No.
27850-1

Total Pages in this Submission
32

Application Elements (Continued)

3. ☒ Drawing(s) *(when necessary as prescribed by 35 USC 113)*

   a. ☒ Formal b. ☐ Informal Number of Sheets **FOUR**

4. ☒ Oath or Declaration

   a. ☒ Newly executed *(original or copy)* ☐ Unexecuted

   b. ☐ Copy from a prior application (37 CFR 1.63(d)) *(for continuation/divisional application only)*

   c. ☒ With Power of Attorney ☐ Without Power of Attorney

   d. ☐ *DELETION OF INVENTOR(S)*
   Signed statement attached deleting inventor(s) named in the prior application, see 37 C.F.R. 1.63(d)(2) and 1.33(b).

5. ☐ Incorporation By Reference *(usable if Box 4b is checked)*
The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 4b, is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein.

6. ☐ Computer Program in Microfiche

7. ☐ Genetic Sequence Submission *(if applicable, all must be included)*

   a. ☐ Paper Copy

   b. ☐ Computer Readable Copy

   c. ☐ Statement Verifying Identical Paper and Computer Readable Copy

Accompanying Application Parts

8. ☐ Assignment Papers *(cover sheet & documents)*

9. ☐ 37 CFR 3.73(b) Statement *(when there is an assignee)*

10. ☐ English Translation Document *(if applicable)*

11. ☐ Information Disclosure Statement/PTO-1449 ☐ Copies of IDS Citations

12. ☐ Preliminary Amendment

13. ☒ Acknowledgment postcard

14. ☒ Certificate of Mailing

    ☐ First Class ☒ Express Mail *(Specify Label No.):* **EK704812145US**

UTILITY PATENT APPLICATION TRANSMITTAL
(Small Entity)

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Docket No.
27850-1
Total Pages in this Submission
32

Accompanying Application Parts (Continued)

15. ☐ Certified Copy of Priority Document(s) *(if foreign priority is claimed)*

16. ☒ Small Entity Statement(s) - Specify Number of Statements Submitted: ONE

17. ☐ Additional Enclosures *(please identify below):*

Request That Application Not Be Published Pursuant To 35 U.S.C. 122(b)(2)

18. ☐ Pursuant to 35 U.S.C. 122(b)(2), Applicant hereby requests that this patent application not be published pursuant to 35 U.S.C. 122(b)(1). Applicant hereby certifies that the invention disclosed in this application has not and will not be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication of applications 18 months after filing of the application.

Warning

An applicant who makes a request not to publish, but who subsequently files in a foreign country or under a multilateral international agreement specified in 35 U.S.C. 122(b)(2)(B)(i), must notify the Director of such filing not later than 45 days after the date of the filing of such foreign or international application. A failure of the applicant to provide such notice within the prescribed period shall result in the application being regarded as abandoned, unless it is shown to the satisfaction of the Director that the delay in submitting the notice was unintentional.

UTILITY PATENT APPLICATION TRANSMITTAL
(Small Entity)

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Docket No.
27850-1
Total Pages in this Submission
32

Fee Calculation and Transmittal

CLAIMS AS FILED

For	#Filed	#Allowed	#Extra		Rate	Fee
Total Claims	20	- 20 =	0	x	$9.00	$0.00
Indep. Claims	3	- 3 =	0	x	$40.00	$0.00
Multiple Dependent Claims (check if applicable) ☐						$0.00
					BASIC FEE	$355.00
OTHER FEE *(specify purpose)* _____						$0.00
					TOTAL FILING FEE	$355.00

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- ☐ Charge the issue fee set in 37 C.F.R. 1.18 at the mailing of the Notice of Allowance, pursuant to 37 C.F.R. 1.311(b).

Dated: 11/2/00

Michael A Mann
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cc:

VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY STATUS (37 CFR 1.9(f) AND 1.27 (b)) - INDEPENDENT INVENTOR	Docket No. 27850-1

Serial No.	Filing Date	Patent No.	Issue Date
	HEREWITH		

Applicant/ Patentee: **BARNES, RICHIE D**

Invention: **MOTORCYCLE SOUND SYSTEM**

As a below named inventor, I hereby declare that I qualify as an independent inventor as defined in 37 CFR 1.9(c) for purposes of paying reduced fees under section 41(a) and (b) of Title 35, United States Code, to the Patent and Trademark Office with regard to the invention entitled above and described in:

- ☒ the specification to be filed herewith.
- ☐ the application identified above.
- ☐ the patent identified above.

I have not assigned, granted, conveyed or licensed and am under no obligation under contract or law to assign, grant, convey or license, any rights in the invention to any person who could not be classified as an independent inventor under 37 CFR 1.9(c) if that person had made the invention, or to any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e).

Each person, concern or organization to which I have assigned, granted, conveyed, or licensed or am under an obligation under contract or law to assign, grant, convey, or license any rights in the invention is listed below:

- ☒ No such person, concern or organization exists.
- ☐ Each such person, concern or organization is listed below.

*NOTE: Separate verified statements are required from each named person, concern or organization having rights to the invention averring to their status as small entities (37 CFR 1.27)

FULL NAME _____

ADDRESS _____

☐ Individual ☐ Small Business Concern ☐ Nonprofit Organization

FULL NAME _____

ADDRESS _____

☐ Individual ☐ Small Business Concern ☐ Nonprofit Organization

FULL NAME _____

ADDRESS _____

☐ Individual ☐ Small Business Concern ☐ Nonprofit Organization

FULL NAME _____

ADDRESS _____

☐ Individual ☐ Small Business Concern ☐ Nonprofit Organization

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

NAME OF INVENTOR **RICHIE D BARNES**
SIGNATURE OF INVENTOR ____ DATE: Nov. 21, 2000

NAME OF INVENTOR ____
SIGNATURE OF INVENTOR ____ DATE: ____

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SIGNATURE OF INVENTOR ____ DATE: ____

NAME OF INVENTOR ____
SIGNATURE OF INVENTOR ____ DATE: ____

PATENT

MOTORCYCLE SOUND SYSTEM

Inventor: Richie D. Barnes

Address: 41 Canterbury Court

Columbia, South Carolina 29210

Citizenship: U.S. Citizen

MOTORCYCLE SOUND SYSTEM

1. Field of the Invention:

The present invention relates to motorcycle sound systems. In particular, the present invention relates to a sound system having audio components and external speakers adapted to the requirements of the electrical system of a sportsbike-type motorcycle.

2. Background of the Invention:

For many years, there existed no audio components that were designed specifically for motorcycles. The only music options available for motorcycle riders were either to wear headphones coupled with a portable personal radio-receiver or to somehow carry or attach to the motorcycle a small radio with a loudspeaker. Neither of these options yielded satisfactory results; riders wearing headphones had impaired perception of traffic conditions, and riders using small radios with loudspeakers were dissatisfied with sound quality and volume.

Consequently, in order to meet riders' needs, there have been modest developments in the field of motorcycle sound systems. For example, helmet-mounted speaker systems have been invented to take the place of headphones. U.S. Pat. Nos. 4,524,461; 5,119,505; 5,243,659; and 6,075,857 disclose motorcycle helmets that contain integrated speakers suitable for listening to music as an element of the invention. Unfortunately, these improvements cannot meet the needs of multiple listeners or the needs of riders who are not wearing helmets.

Further, handlebar- or gas-tank- mounted devices have enabled riders to more easily carry their radios and loudspeakers. U.S. Pat. Nos. 4,436,350; 4,754,901; 4,756,454; 4,856,364; 4,974,759; 4,981,243; 5,001,779; and 5,771,305 disclose assemblies that allow small radios with loudspeakers to be carried on bicycles, scooters, or motorcycles. However, the sound quality and volume are generally unsatisfactory. In several of these inventions, the device either obscures the speedometer and other gauges, or covers the gas-tank opening, making refueling more difficult. Further, these devices are plainly visible when mounted, and thus vulnerable to theft or vandalism.

Also, there have been developments in speaker technology, allowing riders to include speakers into the existing body of the motorcycle. U.S. Pat. Nos. 4,445,228; 4,600,208; and 4,768,870 disclose systems for integrating speakers inside the rearview-mirrors of a motorcycle and for distributing speakers on a motorcycle to enhance sound quality and availability. While these inventions are important developments toward better motorcycle sound systems, they do not provide a fully-integrated system that avoids all of the aforementioned difficulties.

In addition, custom manufacturing companies have been able to develop sound systems for motorcycles having significant available storage space. For example, on motorcycles with "saddlebags," stereo systems have been mounted inside this available space, and speakers have been mounted on the handlebars. While this option seems to solve most of the difficulties experienced by motorcycle riders desiring a sound system, motorcycles that lack substantial storage space are, disappointingly, excluded from enjoying this option.

Currently, only riders of large, cruiser-type motorcycles that have electrical systems capable of supporting audio components can enjoy a sound system. Unfortunately, the very popular, smaller sportsbike-type motorcycle cannot support such a system, due to limited

available space and limited electrical output. Presently, a sportsbike rider's only recourse is the use of audio components that are mounted on the exterior of the sportsbike subsequent to manufacture. The most popular alternative available for sportsbike riders is an aftermarket commercially-available strap-on tank bag that carries portable audio components, manufactured by E & E Products under the trademark TANKTUNES. However, just as in the aforementioned inventions, this alternative has several disadvantages. First, the bag covers the gas-tank and thus must be removed each time the motorcycle requires refueling, then reattached for subsequent use. Second, the bag is visible to passers-by while the motorcycle is parked; unless the bag is removed each time, the audio components are vulnerable to theft or vandalism. Lastly, the bag gives the motorcycle a cheap, makeshift appearance. As a result there exists considerable need for a built-in sound system for motorcycles, and for sportsbike-type motorcycles in particular.

Moreover, the prior art has taught that installing a sound system in a motorcycle presents difficulty in assembly, and experience has shown that a system restricted to the limited electrical capabilities of a sportsbike lacks "punch," or output at dynamic highs. In custom-designed automobile-based sound systems, individuals have been known to use capacitors in connection with the vehicle's battery to provide punch. These capacitors are stored in the trunk of the vehicle. However, sound systems in vehicles have been well known for decades. Sound systems in sportsbikes, however, are believed to be not only completely unknown but also contrary to the prevailing practice of minimizing the electrical demand on these types of motorcycles because of the limitations of their electrical power source. Thus, there exists considerable need for a motorcycle sound system that is easily incorporated into the design of the motorcycle and is capable of providing the "punch" desired by listeners.

SUMMARY OF THE INVENTION

According to its major aspects and briefly described, the present invention is a sound system for a motorcycle. In particular, the present invention is a sound system for sportsbike-type motorcycles. The present sound system is incorporated into existing structures of sports bikes and uses a capacitor in connection with the vehicle's battery to deliver more effective dynamic highs or "punch" to the amplifier.

An important feature of the present invention in the preferred embodiment is the use of a capacitor in electrical connection with the battery and amplifier to provide audio response during dynamic highs; as a result, the sound does not lack "punch." The capacitor can be incorporated easily into existing structure without adding undue weight and with no burden on the electrical system of the sportsbike.

Another feature of the present invention is the use of existing structures on a sportsbike to house the components of the sound system. Unlike touring bikes, sportsbikes are designed for speed and agility. The aerodynamics cannot be compromised. When integrated in a sportsbike in accordance with the present invention, the present sound system does not alter the outward appearance of the motorcycle and thus cannot be observed by passers-by; the present invention is therefore less vulnerable to theft or vandalism. Nor are the profile and aerodynamics, and therefore performance characteristics, changed by the integration of the sound system with a sportsbike.

Another feature of the present invention is that the components can be packaged in a cowling that can then be sold in the aftermarket as an option. The sound system-housing cowling can then be mounted without significant modification of the motorcycle, since the

cowling used to contain the system preferably has the same profile as commercially available cowlings from the manufacturer of the sportsbike.

Other features and their advantages will be apparent to those skilled in the field of motorcycle sound systems from a careful reading of the Detailed Description of Preferred Embodiments.

BRIEF DESCRIPTION OF THE DRAWINGS

In the drawings,

Fig. 1 is a schematic of the system **12** and included components of a motorcycle sound system according to a preferred embodiment of the present invention.

Fig. 2 is a side view of a sportsbike-type motorcycle **10** equipped with a motorcycle sound system according to a preferred embodiment of the present invention.

Fig. 3 shows the placement of the various elements of a motorcycle sound system **12** according to a preferred embodiment of the present invention on a sportsbike-type motorcycle.

Fig. 4 shows the placement of the various elements of a motorcycle sound system **12** according to a preferred embodiment of the present invention within cowling **34**.

Fig. 5 is a top view of a sportsbike-type motorcycle **10** equipped with a motorcycle sound system according to a preferred embodiment of the present invention.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS

The invention is a sound system that can operate within the structural design and the power requirements of the electrical system of a sportsbike-type motorcycle. Because sportsbikes are designed to be faster and more maneuverable than traditional cruising-type

motorcycles, they are smaller, lighter, more aerodynamic and carry fewer accessories. These characteristics dictate a limited electrical-power system. It is these limitations on space and electrical power that makes equipping a sportsbike with a full-featured integrated sound system non-obvious in-and-of-itself and difficult in practice.

Normally, the electrical system of a sportsbike is powered by a 12 V battery that is recharged during operation by the sportsbike's alternator. The battery serves to power any electrical devices carried by the sportsbike and is sufficient to provide adequate electrical power for devices that require only a small amount of power. However, the power requirement of a sound system using external speakers and an amplifier is too great for the battery and alternator during instances of peak power demand, also referred to as dynamic highs. Because of the lack of adequate power for the amplifier and speakers during dynamic highs, the resulting sound would lack "punch." Music that lacks "punch" during instances of peak power demand sounds "flat."

The present invention overcomes this inadequacy through the use of a capacitor. A capacitor is a device used to store excess electrical energy. In the most preferred embodiment of the present invention, a capacitor is charged by the battery and, during operation, the alternator. When the sound system's required output exceeds the maximum battery output, the capacitor can provide the additional required electricity during dynamic highs. As a result, the sound does not sound flat or lack "punch."

Referring now to Fig. 1, there is shown a schematic of the system components of a motorcycle sound system according to the present invention and generally indicated by reference number **12**. System **12** includes a battery **14** in electrical connection with a capacitor **16**. Normally, battery **14** is a standard commercially-available 12 V battery for use with motorcycles.

The capacitor used in the most preferred embodiment of the present invention is preferably a 1 Farad capacitor, but the present invention is not limited to 1 Farad of capacitance or to a single capacitor. System **12** also includes at least one audio component **18**. In a preferred embodiment, audio component **18** is an FM stereo receiver; however, **18** can also be a compact disc player, an audio cassette player, a minidisc player, a digital audiotape player, or an MP3 player. Moreover, the invention is not limited to a single audio component. In addition, audio component **18** can be operably connected to an auxiliary audio component **20**. Auxiliary audio component **20** can also be an FM stereo receiver, a compact disc player, an audio cassette player, a minidisc player, a digital audiotape player, or an MP3 player. Alternatively, the auxiliary audio component **20** can be an equalizer. Both audio component **18** and auxiliary audio component **20**, if present, are grounded to the frame of sportsbike **10**.

Another important feature of the present invention is amplifier **22**. Amplifier **22** is operably connected with audio component **18**; normally, the means for communicating electrical signals is via audio cable, but this is not limiting. Amplifier **22** is necessary to increase the power of the signal from audio component **18** in order to drive a signal-to-audio transducer, such as speakers **24**. As with audio component **18** and auxiliary audio component **20**, amplifier **22** is grounded to the frame of motorcycle **10**. Speakers **24** are preferably incorporated into existing structures on the motorcycle **10**, for example, in the rearview-mirror casings **26**, the turnsignal casings **28**, the brakelight casings **30**, the fairings **32**, the cowling **34**, and the trunk **36**. Further, speakers **24** are operably connected to amplifier **22** by a means for communicating signals, normally audio cables, but which could also be infrared light, FM signals, or the like.

Referring now to Fig. 2, there is shown a side view of a sportsbike-type motorcycle **10** equipped with motorcycle sound system **12** according to the most preferred embodiment of the

present invention. When integrated in sportsbike **10**, the system **12** does not alter the appearance of the motorcycle and cannot be observed by passers-by.

Referring now to Fig. 3, there is shown the placement of the various elements of a motorcycle sound system **12** according to a preferred embodiment of the present invention on a sportsbike-type motorcycle **10**. It is an important feature of the present invention that the profile and appearance, and therefore performance characteristics, are not changed by the integration of system **12** with sportsbike **10**. It is also significant that more than one pair of speakers **24** can optionally be used in system **12**, as shown in this embodiment of the present invention.

Further, optional elements can be added to sound system **12**; these can include, but are not limited to, infrared- or FM-signal remote control unit **38** with remote control signal receiver **40**, and helmet-mounted speakers **42** with remote control signal receiver **44**.

Referring now to Fig. 4, there is shown the placement of the various elements of sportsbike sound system **12** inside cowling **34** according to a preferred embodiment of the present invention. Cowling **34** is dimensioned so as to be large enough to receive audio component **18**, amplifier **22**, any auxiliary audio component **20**, and, if desired, speakers **24**. Capacitor **16** can be included in cowling **34**, trunk **36**, or mounted beneath trunk **36** and above the rear wheel. It is an important advantage of the present invention that the system **12** as shown in Fig. 4 can be packaged as an aftermarket option for commercially-available sportsbike **10** and attached without significant modification of sportsbike **10**, since cowling **34** is preferably selected from commercially available options from the manufacturer of sportsbike **10**.

It will be apparent to those knowledgeable in the field of motorcycle sound systems that many modifications and substitutions can be made to the foregoing preferred embodiment

without departing from the spirit and scope of the present invention, defined by the appended claims.

LIST OF REFERENCE NUMBERS

sportsbike-type motorcycle **10**

motorcycle sound system, generally **12**

battery **14**

capacitor **16**

audio component **18**

auxiliary audio component **20**

amplifier **22**

speakers **24**

rearview-mirror casings **26**

turnsignal casings **28**

brakelight casings **30**

fairings **32**

cowling **34**

trunk **36**

remote control unit **38**

remote control signal receiver **40**

helmet-mounted speakers **42**

remote control signal receiver **44**

WHAT IS CLAIMED IS:

1. A motorcycle sound system for use with a sportsbike having a battery, said sound system comprising:

an audio component carried by a sportsbike;

means carried by said sportsbike for conducting power from a battery carried by said sportsbike to said audio component;

a capacitor carried by said sportsbike and in electrical connection with said electrical power source;

an amplifier carried by said sportsbike and in electrical connection with said electrical power source and said capacitor;

first means carried by said sportsbike for communicating signals from said audio component to said amplifier;

at least one signal-to-audio transducer carried by said sportsbike; and

second means carried by said sportsbike for communicating signals from said amplifier to said at least one signal-to-audio transducer.

2. A motorcycle sound system as recited in claim 1, wherein said sportsbike includes existing structures, and wherein said audio component, said power conducting means, said capacitor, said amplifier, said communicating means, and said first and second signals communicating means are carried within said existing structures.

3. A motorcycle sound system as recited in claim 1, further comprising:

a cowling having an interior dimensioned for receiving said audio component, and wherein said audio component, said communicating means, and said amplifier are housed within said cowling.

4. A motorcycle sound system as recited in claim 1, wherein said audio component is selected from the group consisting of FM receiver, compact disc player, audio cassette player, minidisc player, digital audiotape player, MP3 player, and equalizer.

5. A motorcycle sound system as recited in claim 1, further comprising:

at least one auxiliary audio component operably connected to said audio component.

6. A motorcycle sound system as recited in claim 5, wherein said auxiliary audio component is selected from the group consisting of an FM receiver, a compact disc player, an audio cassette player, a minidisc player, a digital audiotape player, an MP3 player, and an equalizer.

7. A motorcycle sound system as recited in claim 1, wherein said at least one signal-to-audio transducer is a speaker.

8. A motorcycle sound system as recited in claim 7, wherein said speaker is housed in an existing structure of said sportsbike, said existing structure selected from the group consisting of helmet, rearview-mirror casing, turnsignal casing, brakelight casing, fairing, cowling, and trunk.

9. A motorcycle sound system for a motorcycle having a battery comprising:

an audio component;

means for conducting power from said battery to said audio component;

a cowling having an interior dimensioned for receiving said audio component;

means for mounting said cowling to said motorcycle;

means for communicating signals from said audio component; and

a speaker.

10. A motorcycle sound system as recited in claim 9, wherein said motorcycle is a sportsbike having existing structures, and wherein said audio component, said conducting means, said cowling, said mounting means and said communicating means are housed within said existing structures.

11. A motorcycle sound system as recited in claim 9, wherein said audio component is selected from the group consisting of an FM receiver, a compact disc player, an audio cassette player, a minidisc player, a digital audiotape player, and an MP3 player.

12. A motorcycle sound system as recited in claim 9, further comprising:

at least one auxiliary audio component operably connected to said audio component.

13. A motorcycle sound system as recited in claim 12, wherein said audio component is selected from the group consisting of FM receiver, compact disc player, audio cassette player, minidisc player, digital audiotape player, MP3 player, amplifier, and equalizer.

14. A motorcycle sound system as recited in claim 9, wherein said sportsbike has existing structures and wherein said speaker is housed within said existing structures.

15. A motorcycle sound system as recited in claim 14, wherein said existing structure is selected from the group consisting of helmet, rearview-mirror casing, turnsignal casing, brakelight casing, fairing, cowling, and trunk.

16. A machine, comprising:

sportsbike having a battery;

an audio component;

means for conducting power from said battery to said audio component;

a cowling having an interior dimensioned for receiving said audio component;

means for mounting said cowling to said sportsbike; and

means for communicating signals from said audio component to at least one speaker.

17. The machine as recited in claim 16, wherein said audio component is selected from the group consisting of FM receiver, compact disc player, audio cassette player, minidisc player, digital audiotape player, MP3 player, amplifier, and equalizer.

18. The machine as recited in claim 16, further comprising:

at least one auxiliary audio component operably connected to said audio component.

19. The machine as recited in claim 16, further comprising existing structures, and wherein said speaker is housed within said existing structure.

20. A motorcycle as recited in claim 19, wherein said existing structure is selected from the group consisting of rearview-mirror casing, turnsignal casing, brakelight casing, fairing, cowling, and trunk.

ABSTRACT OF THE DISCLOSURE

The present invention is a sound system for sportsbike-type motorcycles that uses a capacitor in electrical connection with the battery and amplifier in order to provide audio response during dynamic highs; as a result, the sound does not lack "punch." The sound system is incorporated into existing structures in the sports bike and cannot therefore be observed by passers-by and is therefore less vulnerable to theft or vandalism. Also, the profile and aerodynamics, and therefore performance characteristics, are not changed by the integration of the sound system within the existing structures of a sportsbike. Furthermore, the sound system if incorporated into the cowling structure, can be packaged as an aftermarket option and mounted on a sportsbike without significant modification, since the cowling used to contain the system is preferably selected from commercially-available options from the manufacturer.

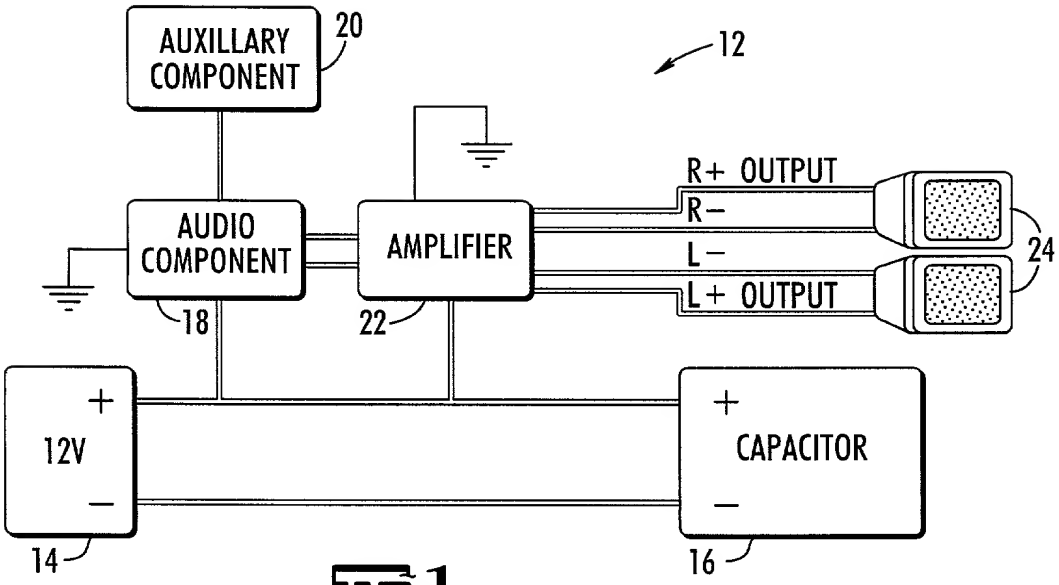
AUXILLARY COMPONENT
20
12
AUDIO COMPONENT
AMPLIFIER
R+ OUTPUT
R−
L−
L+ OUTPUT
24
18
22
12V
+
−
14
CAPACITOR
+
−
16

FIG. 1

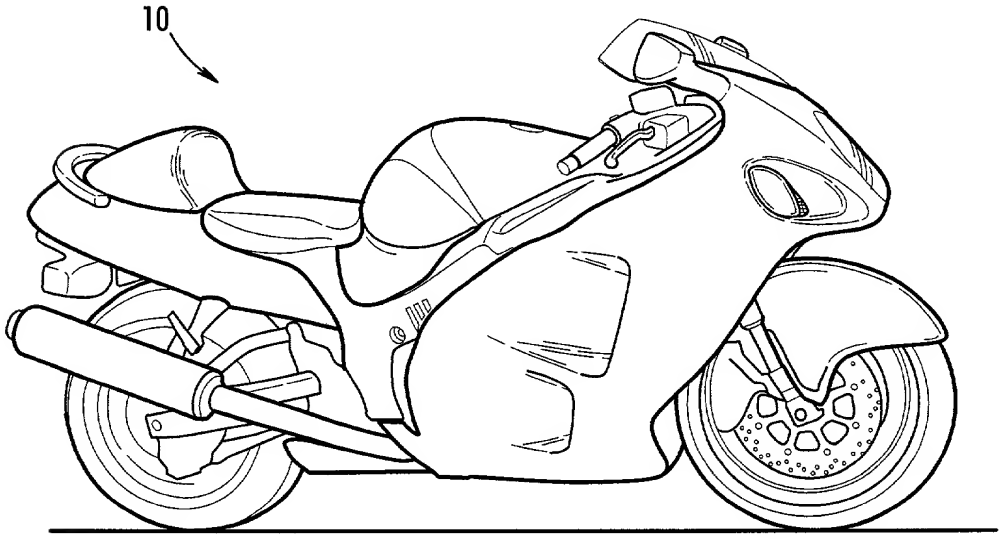
10

FIG. 2

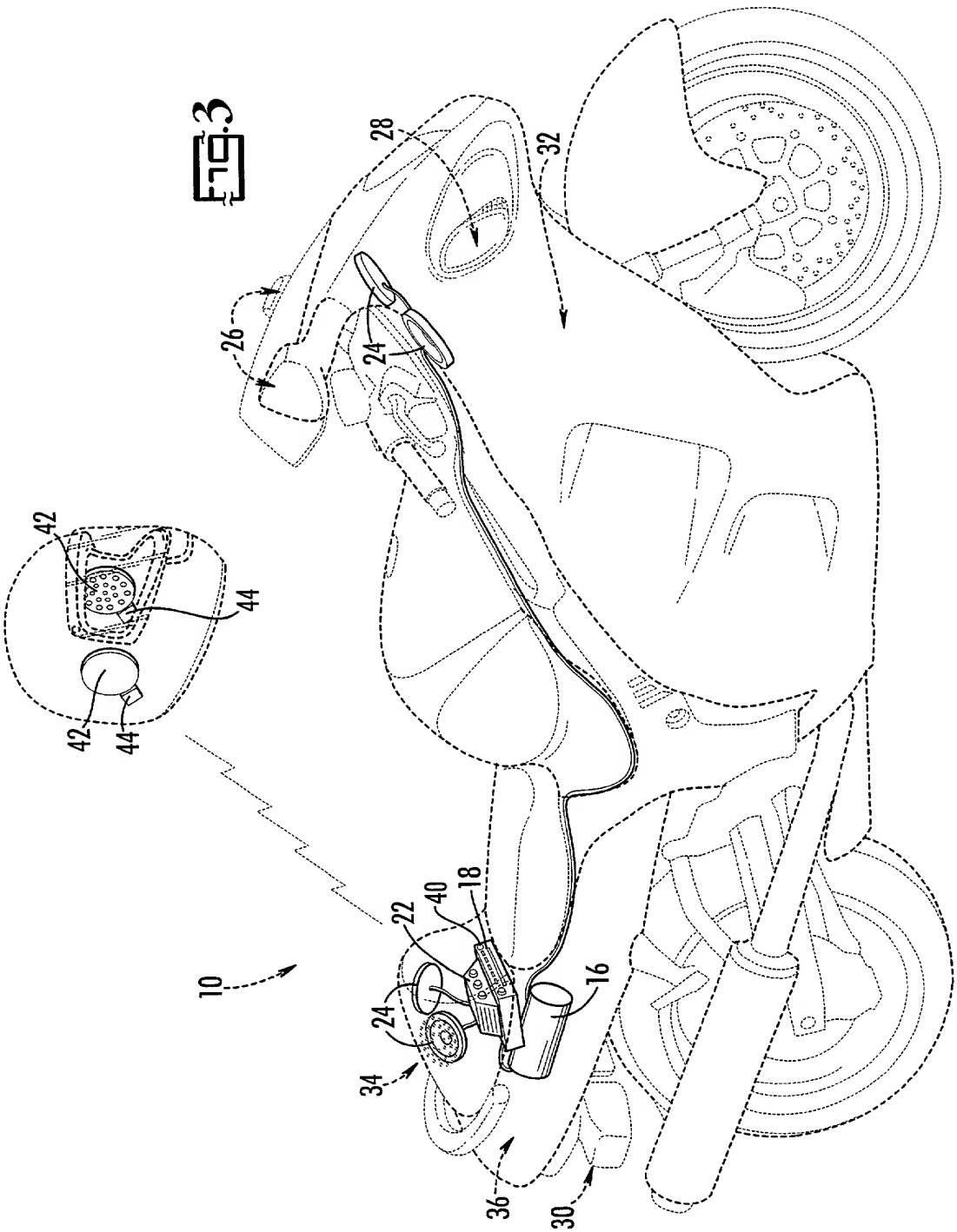

Fig.3

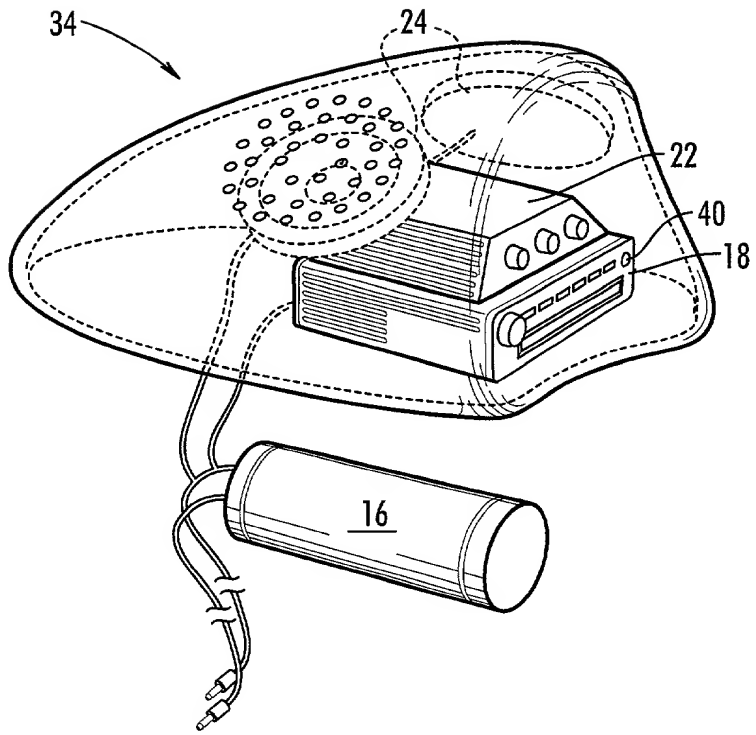

FIG. 4

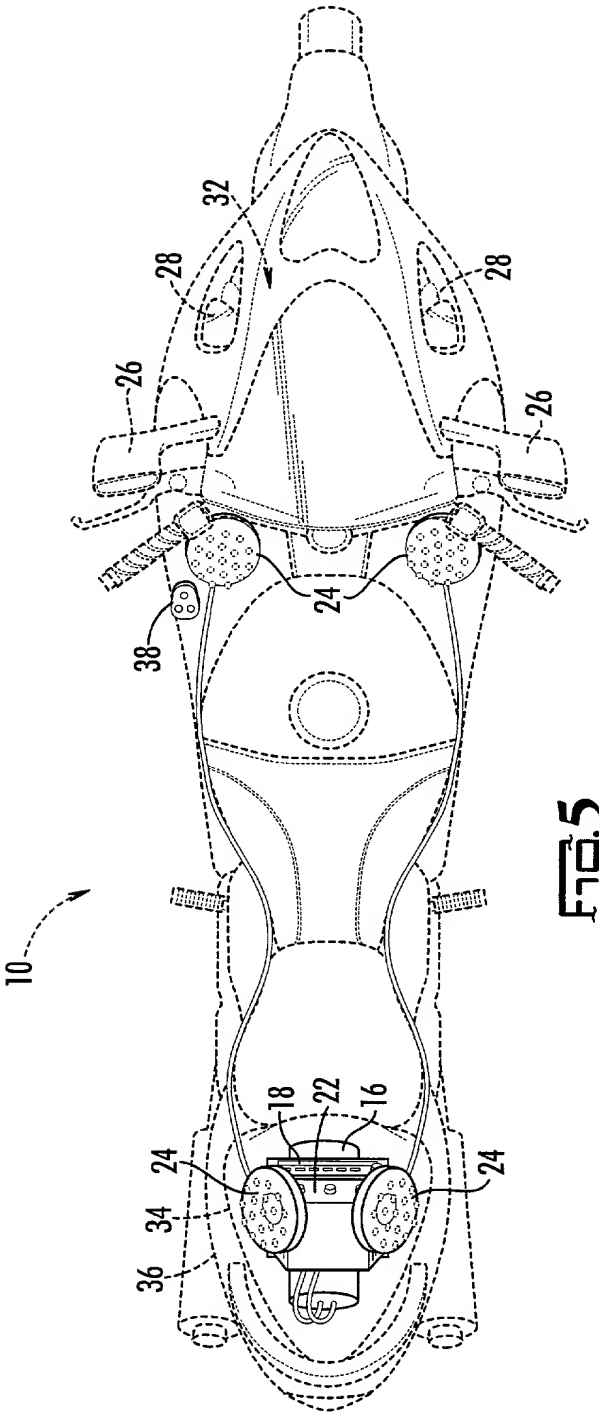

FIG.5

Docket No.
27850-1

Declaration and Power of Attorney For Patent Application

English Language Declaration

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

MOTORCYCLE SOUND SYSTEM

the specification of which
(check one)

☒ is attached hereto.

☐ was filed on _____ as United States Application No. or PCT International Application Number _____

and was amended on _____
(if applicable)

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, Section 119(a)-(d) or Section 365(b) of any foreign application(s) for patent or inventor's certificate, or Section 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate or PCT International application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)			Priority Not Claimed
_____ (Number)	_____ (Country)	_____ (Day/Month/Year Filed)	☐
_____ (Number)	_____ (Country)	_____ (Day/Month/Year Filed)	☐
_____ (Number)	_____ (Country)	_____ (Day/Month/Year Filed)	☐

I hereby claim the benefit under 35 U.S.C. Section 119(e) of any United States provisional application(s) listed below:

(Application Serial No.)	(Filing Date)

I hereby claim the benefit under 35 U. S. C. Section 120 of any United States application(s), or Section 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. Section 112, I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, C. F. R., Section 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application:

(Application Serial No.)	(Filing Date)	(Status) (patented, pending, abandoned)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. *(list name and registration number)*

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